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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,177	07/02/2002	Daniel Hosten	KSN0023	7556
27187	7590	10/15/2004	EXAMINER	
BAKER & DANIELS 205 W. JEFFERSON BOULEVARD SUITE 250 SOUTH BEND, IN 46601			WILKINS III, HARRY D	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,177

Applicant(s)

HOSTEN ET AL.

Examiner

Harry D Wilkins, III

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-18 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. All previous grounds of rejection have been withdrawn in view of Applicant's remarks. However, new grounds of rejection will be presented based on Reynolds (US 5,597,460) under 35 USC 103.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (US 5,597,460).

Reynolds teaches an arrangement enabling a liquid to flow evenly around a surface of a sample, the arrangement comprising:

- a flow chamber having said liquid flowing therethrough (Fig. 1, numeral 10);

- a sample located at least in part in said flow chamber and rotatable about an axis of rotation by means of a rotary drive (col. 5, lines 1-15, Fig. 1, numerals 18 and 22)
- inflow and outflow pipes (Fig. 1, numerals 44 and 30, respectively) each exiting to opposite ends of the flow chamber (Fig. 1, numeral 10) from a flow container (Fig. 1, numeral 38);
- a flow generator (Fig. 1, numeral 34); and,
- filters arranged in the flow container having liquid flowing therethrough (Fig. 1, numeral 36).

However, the difference between the arrangement of Reynolds and the presently claimed arrangement is that Reynolds uses a recycle arrangement wherein the inflow container and the outflow container are combined into one container. In contrast, the present claims use a non-recycling process with both an inflow container and an outflow container.

It would have been obvious to one of ordinary skill in the art to have separated the recycle tank into a separate inflow and outflow containers because, by not recycling the electrolyte, the build up of impurities in the electrolyte can be avoided. Thus, the flow container of Reynolds would become two containers, an inflow container, to which the inflow pipe (44) would be attached and an outflow container, to which the outflow pipe (30) would be attached. The filters would have been placed on the inflow container to ensure no impurities reach the flow chamber (10). In addition, one of ordinary skill in the art would have added an inflow tube terminating in the inflow container in order to

provide means for importing new electrolyte into the arrangement to ensure its continued operation and to have added an outflow tube beginning in the outflow container in order to provide means for removing used electrolyte from the arrangement to waste disposal.

Allowable Subject Matter

6. Claims 2-18 are allowed.
7. The following is a statement of reasons for the indication of allowable subject matter: claims 2-11 and 14-18 are allowable for reasons already of record. Claim 12 is further allowable over the prior art because Reynolds does not reasonably teach the use of an inflow manifold and an outflow manifold having flow tubes extending into the flow chamber. At its broadest interpretation, sparger (46) of Reynolds could be construed as an inflow manifold, however, there is no teaching of or motivation for adding an outflow manifold or flow tubes extending from the sparger into the flow chamber. Therefore, claim 12 is allowable over Reynolds.

Response to Arguments

8. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-Th 10:00am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harry D Wilkins, III
Examiner
Art Unit 1742

hdw


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700